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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,215	06/27/2003	Yasuhiko Kosugi	Q76236	5698

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EXAMINER

NGUYEN, THINH H

ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,215

Applicant(s)

KOSUGI, YASUHIKO

Examiner

Thinh H. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-6,8,11,13,21-23,28 and 29 is/are rejected.
- 7) ☐ Claim(s) 7,9,10,12,14-20 and 24-27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: the term "that" should have been replaced with the term "said certain". Appropriate correction is recommended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-6, 11, 13, 23, and 29 are rejected under 35 U.S.C. § 102(b) as being anticipated by Purcell et al. (U.S.6,227,643)

Purcell (col.5, lines 33-59; col.8, lines 26-41) discloses elements of the instant claimed printing apparatus comprising:

a cartridge mounting portion (22) on which a plurality of ink cartridges are detachably mountable, each said ink cartridge having an element (78) into which information may be written, read, stored via processor (52);

an accumulating means (as described as drop count by the printer; see col.8, line 26-14) for accumulating a discharge amount of ink discharged for every ink cartridge mounted on said cartridge mounting portion;

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Re claims 1, 13, 29, a writing member (see processor 52, col.5, lines 50-51) for writing said information into said element, wherein a threshold (values to be set by the counter so that a limit can be determined, i.e., amount of ink discharge, see col.8, lines 26-41) is provided for every ink cartridge; when an accumulated value obtained by said accumulating means for a certain ink cartridge reaches said threshold provided for said certain ink cartridge, said writing member writes said information into said element of said certain ink cartridge where said accumulated value obtained by said accumulating means for said certain ink cartridge has reached said threshold.

Re claims 2, 23, wherein one ink cartridge is selected out of said plurality of ink cartridges mounted on said cartridge mounting portion according to said accumulated value (it is understood that any one or all cartridges are subject to being selected when ink level approaches empty).

Re claims 3, 11, said writing member writes information about a used amount or residual quantity of ink contained in said ink cartridge into said element in said selected ink cartridge. (col.8, lines 13-25)

Re claim 5, said cartridge mounting portion is movable, and said writing member conducts a writing operation in a non-contact state into said element, when said cartridge mounting portion is in a predetermined positional relationship with said writing member (characterized by RF wireless transmission, col.9, lines 25+)

Re claim 6, said threshold for every ink cartridge is set according to a capacity of ink which may be contained in said ink cartridge (see above discussion).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 8, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell in view of Gast et al. (U.S. 5,583,547)

Purcell discloses elements of the instant claimed subject matter as noted above with the exception of claimed limitations as cited in claims 4, 8, 21-22.

However, Gast discloses:

Re claim 4, when said writing member writes said information into said element of said ink cartridge, said accumulated value is reset (col.4, lines 26-35).

Re claims 8, 21, 22, said writing member writes said information into said element of said ink cartridge in which the accumulated value has reached said threshold, in relation with said flushing operation, wherein when conducting said flushing operation, said writing member selects one ink cartridge out of said plurality of ink cartridges mounted on said cartridge mounting portion according to said accumulated value. (col.5, lines 2-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the information relates to the service period of the printhead based on the drop count as taught by Gast in the information parameter of Purcell for the purpose of providing service at some periods for the printhead.

Allowable Subject Matter

6. Claims 7, 9-10, 12, 14-17, 18-20, 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Patent Application Information Retrieval (PAIR)

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Response to Amendment

8. Applicant's Amendment filed November 14, 2005 has been entered and carefully considered. However, arguments with respect to claims 1-6, 8, 11, 13, 21-23, and 29 are not deemed to be persuasive.

Applicant argues (page 12, par.1) that Purcell does not describe the writing timing. Specifically, does not disclose or suggest at least, when an accumulated value obtained by said accumulating means for a certain ink cartridge reaches said threshold provided for that ink cartridge, said writing member writes said information into said element of that ink cartridge.

The Examiner disagreed with this contention. Purcell (col.8, lines 26-32) is understood to anticipate the writing timing. Particularly, the writing is executed after

counting the number of drops have been ejected from the cartridge. To this extend, when the amount of ink approach a set limit (threshold) corresponding to the empty state, the writing is updated to alert the user the ink status.

Regarding to Applicant's arguments with respect to claim 22, it is understood that any one or all cartridges are subject to being selected when the ink level of a particular cartridge approaches a maintenance cycle that require the particular cartridge to be flushed. Such process is described in Purcell as an operational subroutines.

In view of the foregoing reasons, the examiner asserts that all limitations have been properly evaluated and that the rejection as applied remains proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Contact Information

Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, Thursday from 9:00A – 5:00P. The new official fax phone number

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for the organization is (571) 273-8300. The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen

January 12, 2006

Thinh Nguyen
Primary Examiner
Technology Center 2800